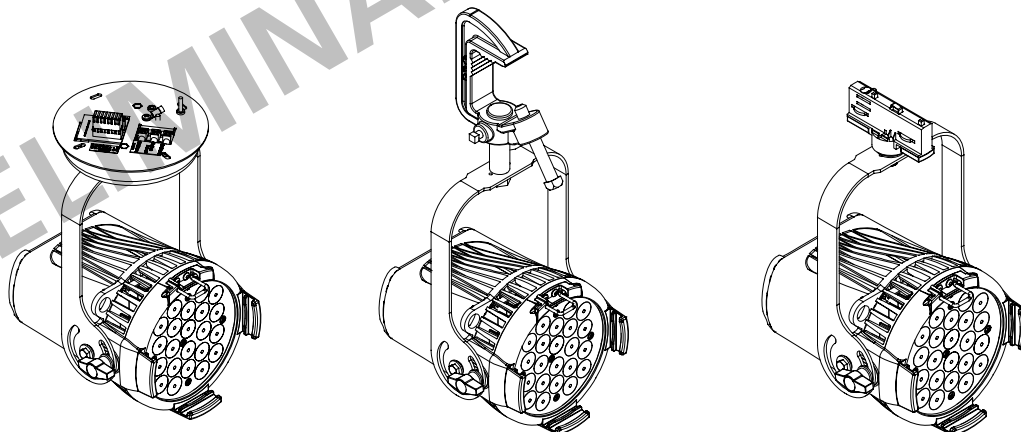




100V 115/120V 230/240V

Desire® Series



## GENERAL INFORMATION

ETC's Desire Series D22 luminaire puts the x7 color system™ into a compact, round wash light. Highly efficient primary lenses and careful color choices make the D22 fixture ideal for stage, studio, architecture and anywhere vibrant color and high intensity are requirements. The Selador® x7 Color System produces the widest range of spectrally-balanced saturated and tinted color choices available, while the static-white options provide an impressive punch. D22's rugged die-cast enclosure, noiseless fan-free operation, multiple lens options, convenient size and advanced user interface make it an ideal addition to the Desire family of LED luminaires.

### D22 LED ARRAY

D22 fixtures are available with any one of the following arrays (not interchangeable) to best suit the intended application.

- D22 Lustr®+: Optimized array with six colors plus high-intensity white LEDs to create an ideal wash fixture for full-range color
- D22 Studio Daylight: Contains twenty-two 5600K LEDs for high-intensity, non-variable cool-white output
- D22 Studio Tungsten: Contains twenty-two 3000K LEDs for high-intensity, non-variable warm-white output

### D22 MOUNTING CONFIGURATIONS

D22 fixtures are available in three different mounting options to fit any installation:

- D22 Portable: Standard yoke-mount hardware; power lead with Edison connector and DMX in/thru connectors
- D22 Install Canopy: Standard yoke-mount and canopy hardware; power lead with bare ends; and a permanent, single DMX in/thru cable
- D22 Track-Yoke: Track adapter and a single, permanent cable for both power and DMX in

## ORDERING INFORMATION

### Selador D22

MODEL	DESCRIPTION
SELD22L	D22 Lustr+ wash fixture: x7 Color System optimized for light tints and skin-tone illumination
SELD22D	D22 Studio Daylight wash fixture: High-intensity, non-variable cool-white light
SELD22T	D22 Studio Tungsten wash fixture: High-intensity, non-variable warm-white light

Note: D22 luminaires ship with hanging yoke, media frame and VN diffusion. See page 2 for connector options. C-clamps are not included.

## SPECIFICATIONS

## GENERAL

- 22-LED color-mixing wash fixture (Lustr+)
- 22-LED static cool- or warm-white wash fixture (Studio Tungsten and Studio Daylight)
- ETL listed general purpose lighting
- IP20-rated for indoor use
- DMX in/thru for easy setup (no DMX thru on D22 Track)
- User-friendly control interface with multiple modes and fixture settings
- Permanent power input cable connected

## PHYSICAL

- Rugged die-cast all-metal housing
- Easy access slots for secondary lenses and 5.5" accessories
- Available in black (standard), white, silver (optional) or custom colors (contact factory)
- Hanging yoke standard
- DMX512 in/thru via five-pin XLR connectors (D22 Portable only)

## ELECTRICAL

- 100VAC to 240VAC 50/60 Hz universal power input
- Requires power from a non-dim source

## LED\*

- 50,000-hour LED life (50,000 hours at 70% intensity)
- 22 Luxeon® Rebel LED emitters

\*See additional LED notes on page three

## COLOR (LUSTR+ ONLY)

- Exclusive Lustr+ x7 Color System™ seven-color LED array
- Beautifully illuminates skin tones and other objects for natural appearance and high color rendering
- Broad-spectrum color interacts seamlessly with conventional sources
- Exclusive optional red-shift option emulates tungsten dimming performance

## OPTICAL

- Primary field angle of 17° and beam angle of 8°
- Secondary lenses available for multiple beam spread options
- Refer to accessories charts for lenses available

## CONTROL

- Multiple control options, including RGB, strobe, and console-free Master/Slave mode
- See DMX Control Table for additional information
- 15-bit virtual dimming engine provides smooth, high-quality theatrical fades, and minimizes color shift during dimming
- RDM functionality for address and setting changes

## THERMAL

- Ambient operating temperature of -4° to 104°F (-20° to 40°C)
- Active electronic thermal management for droop-free operation
- Noiseless, fan-free convection cooling for acoustically sensitive installations
- Fixture is designed for continuous operation up to 104°F (40°C) ambient temperature and requires free flow of air around fixture housing

## ADDITIONAL ORDERING INFORMATION

## Connector Options

Use information below to order input with factory fitted connectors

MODEL	DESCRIPTION
n/a	Portable with Edison connector
-I	Install Canopy Mounting
-T	Track Mounting

## Fixture Accessories

MODEL	DESCRIPTION
SELD22BD	Barn door (Use only as a flexible top hat to diminish aperture glare. Not for beam shaping.)
SELD22CF	5.5" Color Frame (use for round and oblong lenses)
SELD22ECL	Egg Crate Louver
SELD22HS	Half-Shield
400CC	C-Clamp (does not ship with fixture)
400SC	Safety Cable (32")

Note: all model numbers above are for black accessories. Add -1 for white or -5 for silver. Custom colors are available upon request.

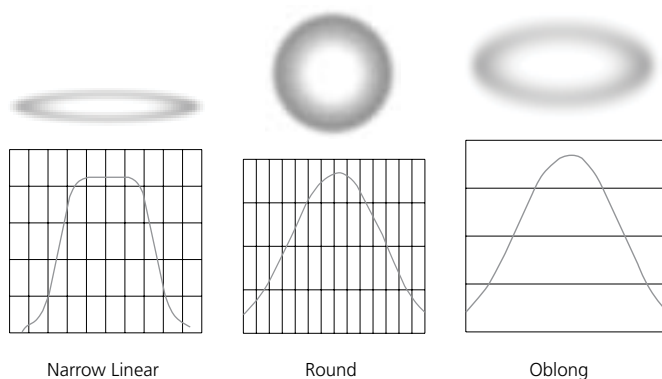
ADDITIONAL ORDERING INFORMATION

Secondary Lens Options

<b>MODEL</b>	<b>DESCRIPTION:</b> The following lenses are cut for D22 fixtures and create round, linear or oblong field patterns as described below. These lenses are not sized for use in Selador® Classic (Vivid-R™, Lustr®, Paletta™, etc.) fixtures.	
<b>Narrow Linear Field</b>	Note: This is the same material as Selador Classic lenses	
SELLVN-D22	Very Narrow lens (narrow linear field)	Linear lenses may be combined to create desired field size, i.e. 40° X 60°
SELLN-D22	Narrow lens (narrow linear field)	
SELLM-D22	Medium lens (narrow linear field)	
SELLW-D22	Wide lens (narrow linear field)	
SELLXW-D22	Extra Wide lens (narrow linear field)	
<b>Round Field</b>		
SELRVN-D22	Very Narrow lens (round field)	
SELRN-D22	Narrow lens (round field)	
SELRM-D22	Medium lens (round field)	
SELRW-D22	Wide lens (round field)	
SELRXW-D22	Extra Wide lens (round field)	
<b>Oblong Field</b>		
SELON-D22	Narrow lens (oblong field)	
SELOM-D22	Medium lens (oblong field)	
SELOW-D22	Wide lens (oblong field)	

[http://www.etconnect.com/docs/docs\\_downloads/miscdocs/Desire vs PAR EA revB.pdf](http://www.etconnect.com/docs/docs_downloads/miscdocs/Desire vs PAR EA revB.pdf)

Typical Lens Field Profiles



Power Consumption at Full Intensity

MODEL	VOLTAGE (V)	CURRENT (A)	WATTS
D22	120 /240	.47	56.5

NOTES ABOUT LED LUMINAIRES

All LED sources experience light-output reduction and some color shift over time. LED output will vary with thermal conditions, which can be affected by ambient temperatures and orientation. See the D40 Ambient Temperature and Power Budgeting Guide for more details. Based on the LED manufacturer's B50 L70 specification, a Selador luminaire will achieve ~70% of its initial output after 50,000 hours of typical usage. In individual situations, LEDs will be used for different durations and at different levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustment to presets, cues or programs.

CRI AND CQS RATINGS

Desire fixtures were evaluated for CRI and CQS performance using measured output spectrum and optimized mix solutions for the best spectral match to black body sources at 3200K and 5600K.

Fixture	CRI	CQS	Color Fidelity	Duv
D22 Lustr+ at 3200K	86	88	88	0.000
D22 Lustr+ at 5600K	93	92	90	0.000

The D22 luminaire provides excellent color rendering to the eye, particularly at higher color temperature settings such as 5600K. A Duv rating of 0.000 indicates that the color mix used is exactly on the black body line, with no green or magenta tint.

CONTROL OPTIONS

User settings on D22 fixtures allow multiple operational modes and settings for either console operation via DMX protocol or stand-alone operation. The expanded LCD display provides easy navigation to all possible settings and options. Some of them are:

- Multiple DMX choices, ranging from a simple RGB profile – which effectively controls all seven LED colors via three channels – to nine-channel ‘direct’ color and intensity control
- Multiple dimming curve options
- Preset colors and sequences for stand-alone (no console required) operation
- White-point selection: White-light and color behavior based on a specific-color-temperature white light, i.e. 3200K, 5600K, etc
- Loss of data behavior options: Instant off, hold last look for two minutes, etc
- Output modes: Three output options that offer the user a choice between maximum output and maximum consistency

See the user manual for a complete explanation of all of the control settings and options for the D40.

Quick Setups

To assist in managing the numerous control and fixture behavior choices, five combinations of operational settings are available to quickly get started. These settings are specifically created for different applications and are easily accessible at the fixture display. Each setting can then be modified as required to take advantage of all of the possible control features.

Setting Title	Profile	Description	Typical Features*
General	Direct	Factory default: For general-purpose use, including interior architectural applications	<ul style="list-style-type: none"> <li>• Standard dimming curve</li> <li>• Regulated output for color consistency</li> </ul>
Stage	HSI Plus 7 Enabled	Theatrical lighting: Duplicates the color and dimming behavior of tungsten stage lighting fixtures.	<ul style="list-style-type: none"> <li>• Incandescent dimming curve</li> <li>• Regulated output for color consistency</li> <li>• 3250K white-point setting</li> </ul>
XT Arch	HSI	Exterior architectural lighting: Provides a high degree of color consistency in high ambient temperature environments.	<ul style="list-style-type: none"> <li>• Standard dimming curve</li> <li>• Protected output</li> <li>• 3200K white point setting</li> </ul>
High Impact	RGB	Event lighting: Enables quickest response, simple RGB control and strobe channel for maximum effect usage	<ul style="list-style-type: none"> <li>• Quick dimming curve</li> <li>• Boost mode for maximum intensity</li> <li>• 5600K white-point setting</li> </ul>
Studio	Studio	Studio factory default: Enables three-parameter control of white light (intensity, white point, and tint) via DMX from a console or from the fixture display – without a console	<ul style="list-style-type: none"> <li>• Linear dimming curve</li> <li>• Regulated output mode for color consistency</li> </ul>

\*See user manual for complete list of features for each Quick Setup

CONTROL OPTIONS

DMX Input Channel Profiles

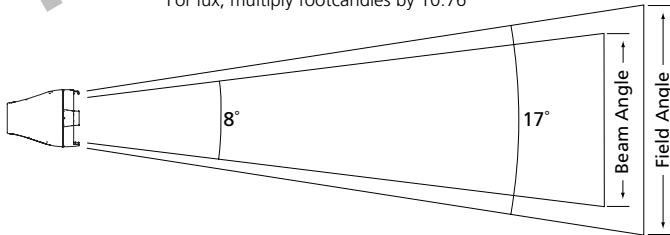
DMX Profile	DMX Channels	Channel Assignments	Notes
Direct	9	1 – Red 2 – Orange (white for Lustr+) 3 – Amber 4 – Green 5 – Cyan 6 – Blue 7 – Indigo 8 – Intensity 9 – Strobe	Direct control of each individual color with a separate master-intensity channel. Color calibration of LEDs is not active in this mode. The nine-channel profile will produce the highest-quality color cross fades.
HSI	5	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe	High-resolution hue (two channels), saturation, and intensity control. HSI mode will produce arbitrary color crossfades around the color space.
HSIC	6	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – Color Point (CCT)	High-resolution hue, saturation and intensity control as above, with the addition of a color-point channel to adjust the color temperature of the fixture in both white light and color. Color crossfade performance is the same as HSI.
RGB	5 (Ch. 4 not used)	1 – Red 2 – Green 3 – Blue 4 – n/a 5 – Strobe	Effectively addresses all seven colors via three channels of control. RGB profile will produce medium-quality color crossfades
Studio	3	1 – Intensity 2 – Color Point (CCT) 3 – Tint	Controls fixture as a white light unit. If no DMX for example, console input is present, the fixture can be adjusted for these three parameters on the U/I at the back of the unit.
Additional profile options			
Plus 7		Seven additional color-control channels are available in RGB, HSI, HSIC, and Studio profile settings. For example, HSI with ‘Plus 7’ enabled becomes a 14-channel profile:	
		1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – n/a 7 – Plus 7 Control on/off 8 – Red 9 – Orange (white for Lustr+) 10 – Amber 11 – Green 12 – Cyan 13 – Blue 14 – Indigo	<p>The desired color and intensity is achieved by using the HSI or RGB channels.</p> <p>Placing channel seven at a value over 51% gives the fixture a 14-channel profile.</p> <p>Channels 8-14 represent the native colors of the fixture and allow the operator to adjust individual color channels to fine tune the color output.</p>
Strobe		Variable strobe control: 0% is no strobe. The fixture output will strobe more rapidly as the strobe channel value approaches 100%.	

PHOTOMETRICS

D22 Lustr+™

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	17°	47,342	1,606	818	TBD
Regulated	17°	42,845	1,433	733	TBD

Metric Conversions: For meters, multiply feet by .3048  
For lux, multiply footcandles by 10.76



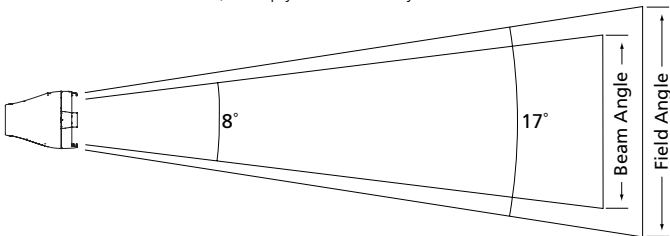
Throw Distance (d)	10'	15'	20'	25'	348'
	3.0m	4.6m	6.1m	7.6m	106m
Field Diameter	3.0'	4.5'	6.0'	7.5'	-
	0.9m	1.4m	1.8m	2.3m	-
Illuminance (fc)	668	297	167	106	.55
Illuminance (lux)	7,193	3,197	1,799	1,151	6

For field diameter at any distance, multiply distance by .301  
For beam diameter at any distance, multiply by 0.145

D22 Studio Daylight

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	22°	45,256	2,858	1,420	TBD
Regulated	22°	41,612	2,624	1,294	TBD

Metric Conversions: For meters, multiply feet by .3048  
For lux, multiply footcandles by 10.76

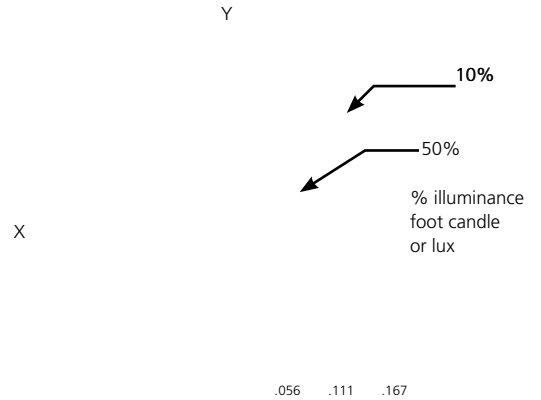


Throw Distance (d)	10'	15'	20'	25'	348'
	3.0m	4.6m	6.1m	7.6m	106m
Field Diameter	3.0'	4.5'	6.0'	7.5'	-
	0.9m	1.4m	1.8m	2.3m	-
Illuminance (fc)	691	307	173	111	.55
Illuminance (lux)	7,442	3,307	1,864	1,191	6

For field diameter at any distance, multiply distance by .390  
For beam diameter at any distance, multiply by 0.198

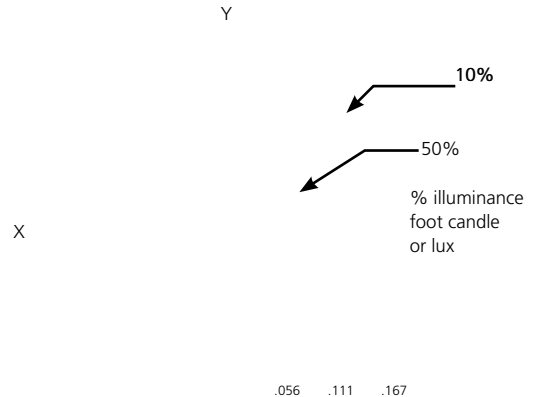
Cosine Candela Plot

Iso-Illuminance Diagram (Flat Surface Distribution)



Cosine Candela Plot

Iso-Illuminance Diagram (Flat Surface Distribution)

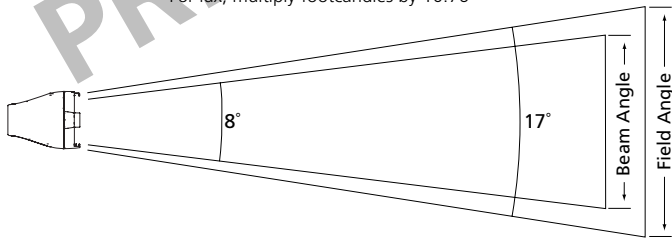


PHOTOMETRICS

D22 Tungsten

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	24°	35,662	2,168	1,029	TBD
Regulated	24°	33,935	2,058	988	TBD

Metric Conversions: For meters, multiply feet by .3048  
 For lux, multiply footcandles by 10.76

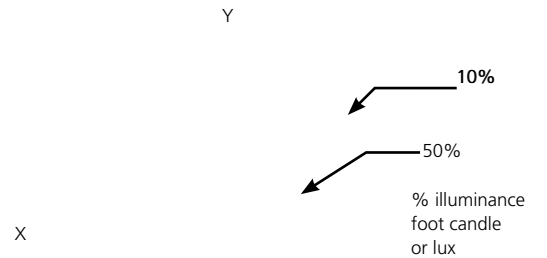


Throw Distance (d)	10'	15'	20'	25'	348'
	3.0m	4.6m	6.1m	7.6m	106m
Field Diameter	3.0'	4.5'	6.0'	7.5'	-
	0.9m	1.4m	1.8m	2.3m	-
Illuminance (fc)	512	227	128	82	.55
Illuminance (lux)	5,508	2,448	1,377	881	6

For field diameter at any distance, multiply distance by .414  
 For beam diameter at any distance, multiply by 0.189

Cosine Candela Plot

Iso-Illuminance Diagram (Flat Surface Distribution)



.056 .111 .167

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PHOTOMETRICS

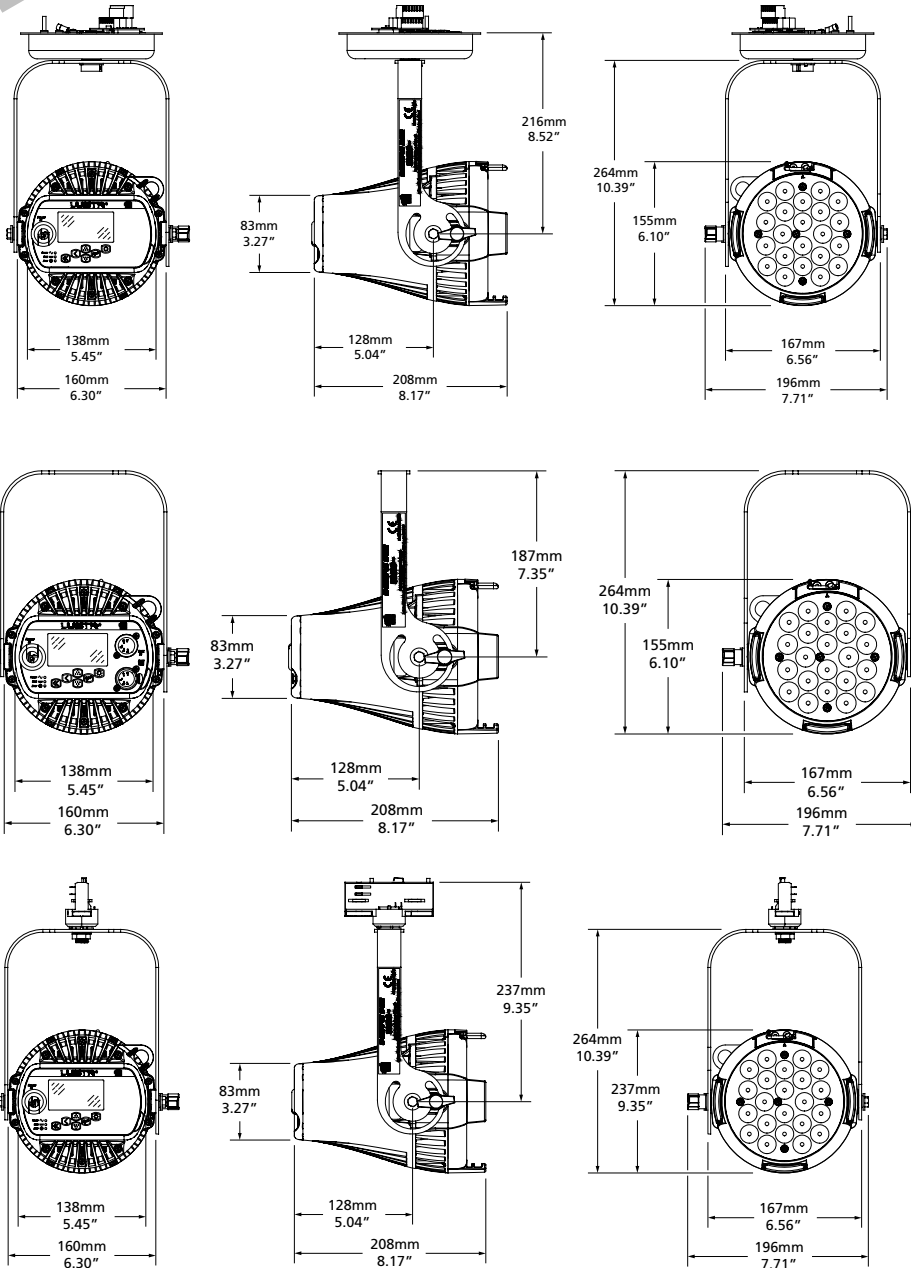
PRELIMINARY

PHYSICAL

Selador D22 Weights and Dimensions

WEIGHT*		SHIPPING WEIGHT	
lbs	kgs	lbs	kgs
6.9	3.13	8.5	3.86

\* Does not include mounting hardware



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